Local Hazard Mitigation Plan Annex Moraga-Orinda Fire District

Introduction

The Moraga-Orinda Fire District is an independent Special District as defined under the Fire Protection District Law of 1987, Health and Safety Code, Section 13800, of the State of California.

The District employs 71 personnel, in addition to approximately 25 reserve firefighters and 10 volunteers. The District maintains 5 fire stations and two administrative office buildings, all strategically located within the District. Of the 5 stations, two house transport Advance Life Support (ALS) ambulances and other specialized vehicles for the cross-staffing of apparatus based upon the type of call. Administrative personnel reside at the Administrative Offices located at 33 Orinda Way, Orinda and at 1280 Moraga Way, Moraga.

The District's service area encompasses approximately 63.5 square miles, covering the community of Canyon, City of Orinda, the Town of Moraga, south of Bollinger Canyon and west to the Alameda/Contra Costa County line; all are located in Contra Costa County.

Within the boundaries of the District are wildland areas, single and multi-family residential units, numerous convalescent/assisted living facilities, equestrian areas, hiking trails, recreational parks that include boating and swimming activities, an essential bay area water treatment facility and a mass transportation station and rail system (BART). The District must be prepared for emergencies and potential exposure to hazardous materials in the area of State Highway 24 and the Caldecott Tunnel that passes through the Moraga-Orinda Fire District. Trucks and other vehicles carry virtually every known hazardous material to points within the Greater Bay Area.

The total population serviced by the District is approximately 40,000. This estimate includes a prestigious private college located in the Town of Moraga (Saint Mary's College of California) and business activities throughout the business day.

The District's philosophy with regard to fire, medical or hazardous material emergencies has been one of a strong, rapid deployment of appropriate resources to mitigate any emergency as recognized by a Class 3 Insurance Service Office (ISO) rating. The District's goal is an overall response time of 5 minutes. Under normal conditions, emergency response companies can be deployed for an emergency within the boundaries of the Moraga-Orinda Fire District (two engine companies, one truck company, one medical response and a Battalion Chief).

The District's Training Division is active in coordinating periodic training activities with many local agencies, such as the Town of Moraga, City of Orinda, Saint Mary's College, Contra Costa County Fire District, East Bay Regional Parks District, and California

Department of Forestry. Activities have included emergency response mutual aid and hazardous materials.

The Moraga-Orinda Fire District provides a full service fire prevention and risk mitigation function through the Office of the Fire Marshal. Within the Office of the Fire Marshal, fire prevention and risk mitigation activities include working closely with various community agencies, utility providers and builders to facilitate construction activities with in the District. These activities include inspection services (building construction, code enforcement and fire protection and warning systems), exterior vegetation hazard control mitigation, public outreach and relations, fire investigations, building construction plan review and applicable code and ordinance adoption. Each activity is important to ensure the fire safety and mitigate risk within the boundaries of the District.

Public education and outreach is also an integral program within the Office of the Fire Marshal. Public education involves an "All Risk" approach that includes CPR, First Aid, emergency preparedness, fire safety, child car seat installation and education, smoke detector installation, emergency evacuation drills for buildings and neighborhoods and active participation within the public school system from grades K through 12 and with Saint Mary's College. These programs reach out to civic and neighborhood groups, service clubs and local governments. The Fire District is also an active participate (providing instructors) in the Lamorinda CERT program.

The Planning Process

The Moraga-Orinda Fire District has historically been pro-active in the mitigation of possible hazards within the scope of responsibility. The District's efforts have involved building on existing programs and identifying gaps that may provide disaster vulnerabilities. This process provides ways to address the risks through appropriate mitigation strategies. Many of the activities conducted by the Fire District are part of an existing Disaster Plan adopted by the Moraga-Orinda Board of Directors.

The Fire District continues to address risks within the community. Currently the Fire District is completing a Standards of Coverage study and a Wildland-Urban Risk Assessment which will become an integral part of a complete Wildland-Urban Mitigation Plan for the 63.5 square miles and 13,600 parcels served by the District. This completed mitigation plan will be adopted by the Fire District Board of Directors and presented to the communities the District serves for ratification.

Many of the activities conducted by the District were fed into the planning process for the multi-jurisdictional plan. The District participated in various ABAG workshops and meetings, including meetings on developing the fire mitigation strategies for the multi-jurisdictional plan. In addition, the District has provided oral comments on the multi-jurisdictional plan. Finally, the District provided information on facilities that are viewed as "critical" to ABAG.

Key District staff met on two occasions to identify and prioritize mitigation strategies appropriate for the District. Staff involved in these meetings included the member of Fire District Board of Directors, the chief officers, and representatives from the rank and file. At the first meeting, the general priorities and appropriate District programs were identified. The second meeting identified preliminary budgets and potential funding sources for strategies designed as "High" priority. The District provided the opportunity for the public to comment on the DRAFT mitigation strategies selected by District staff at the District Board meeting on November 16, 2005. The resolution adopting the plan and strategies was on the District Board agenda for December 14, 2005. The mitigation strategies will become an implementation appendix to the District's Strategic Plan.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquake (faulting, shaking, earth-quake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). These hazards also impact the community served by the Fire District, as well as district facilities, except for tsunamis.

Tsunamis are not an issue because the District does not border the Pacific Ocean or San Francisco Bay. Information concerning these hazards can be viewed by accessing the detailed maps of general hazards provided on the ABAG website at http://quake.abag.ca.gov/mitigation/.

Information on disasters declared in Contra Costa County is at http://quake.abag.ca.gov/mitigation/disaster-history.html.

The Fire District examined the hazard exposure of its 6 critical facilities based on the information provided at the ABAG website.

- ♦ Earthquake faulting No active faults run within the city so rupture of a fault is not a direct concern.
- Earthquake shaking all 6 facilities are at risk of severe earthquake shaking.
- ♦ Earthquake-induced landslides the California Geological Survey has not completed mapping of this hazard in the District. The hazard is expected to be similar to that for rainfall-induced landsliding.
- ♦ Earthquake liquefaction two critical facilities are in areas of high liquefaction susceptibility.
- ◆ Tsunamis While tsunamis may be a hazard in the District, including to critical facilities, the District does not border the Pacific Ocean or the Bay.
- Flooding one critical facility is in the 100-year flood plain.
- ♦ Landslides no critical facilities are in areas of existing landslides.
- ♦ Wildfires three critical facilities are in the wildland-urban interface threat areas.
- ♦ Dam Inundation one critical facility is in an area subject to dam inundation.

The District plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure and critical facilities which might result from any of the hazards noted above. The ABAG Annex states that ABAG will be doing this work in 2005 through early 2006. Drought, though a potential problem in the District for it can lead to increased fire threat, is not fully assessed. The District will work with ABAG and various water supply agencies on this issue in the future.

The District has completed a seismic study of its critical buildings and has ranked needed mitigation. To date one critical structure has been seismically updated, two critical structures have been replaced and a long term replacement and upgrade plan is in place to address the three remaining structures. The District will continue to evaluate the remaining hazards and their potential impacts on facilities through its Strategic Planning process, the review of ABAG information and the completion of the Wildland-Urban Interface Fire Mitigation Plan. The Fire District has concluded through its current strategies that the greatest threats to District structures exist from earthquake and wildfire. These are the current primary areas being addressed for hazard mitigation and control.

As these impacts are not fully developed, the District has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking), flooding, wildfire, and landslides (including unstable earth) pose a significant risk for potential loss.

Mitigation Activities and Priorities

At the formation of the Fire District in 1997, District staff, members of the community and newly appointed Board of Directors made a decision that the most pressing hazard that existed concerned the seismic conditions of the fire stations. Through the long range planning process, the Fire District has retrofitted (receiving a federal grant) one fire station and have replaced two others. The long range plan for the Fire District shows replacement or retrofit of the remaining facilities.

The Moraga-Orinda Fire District recognizes that a wildfire event within the District poses a threat to critical structures. In order to systematically address this serious issue, the Fire District has chosen to conduct a District-wide (63.5 square miles and 13,600 parcels) wildfire risk assessment. At the completion of this risk assessment, a Wildland-Urban Interface Fire Mitigation Plan will be completed that will address the mitigation of issues and concerns surrounding this important threat.

In 2005 the District completed its second comprehensive Strategic Planning process. This process involved representatives from every discipline within the District. The resulting document identifies strengths and needs within program areas, priorities these needs and identifies a process to accomplish the task to mitigate and complete the need. This document is an important component to the advancement of the Fire District and is a parent document to the Long-Range Plan.

The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, we are committed to developing better hazard and risk information to use in making those trade-offs. We are not trying to create a disaster-proof region, but a disaster-resistant one. In addition, several of the strategies are existing District programs.

It is important to note that these documents along with other existing activities and mitigation planning will not provide a disaster proof Fire District but will provide the needed information and techniques for a disaster resistive Fire District.

The Fire District also is an active participant in the development of the City of Orinda and the Town of Moraga's Local Hazard Mitigation Plan

The Plan Maintenance and Update Process

The Fire Chief designee will ensure that monitoring of this annex, the new Wildland-Urban Interface Fire Mitigation Plan and the existing District Disaster Plan will occur. The plans will be monitored on an on-going basis with regular reporting to the Fire District's Board of Directors and the communities the District serve. The District is committed to reviewing and updating the plan annex at least once every five years as required by the Disaster Mitigation Act of 2000. The Fire Chief's designee will contact ABAG four years after the plan is approved to ensure that ABAG will undertake the plan update process. The Fire District is also committed to working with other interested agencies and jurisdictions in the continued development and updating of multi-jurisdictional planning.

The public will continue to be involved in the plan update and as appropriate during the monitoring and evaluation process. Prior to the adoption of plan updates, the District will provide the opportunity for the public to comment on the proposed updates. This will be done through the recognized public process of noticing public meeting (posting).